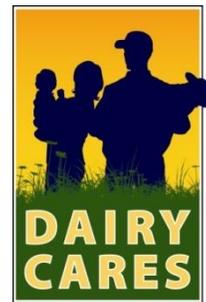


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Dairy Cares Newsletter

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Dairy families and CDFA partner on new ways to reduce methane

The California Department of Food and Agriculture (CDFA) awarded \$9.64 million in grant funding to 17 dairy farms for their proposed projects to improve manure management. The inaugural recipients of the [Alternative Manure Management Program \(AMMP\)](#) represent a wide range of dairy farms across California—all looking to do their part. Dairy families are matching the grant funds with an estimated \$2.7 million. Through these initial projects—and more to come—a growing number of dairy families will be actively working to reduce methane emissions.

A total of 53 applications were submitted for this first round of the AMMP. A wide range of projects were selected, including solid-separation, scrape conversion, pack barns, compost enhancement, and pasture enhancement. In general, these “alternative” or non-digester projects are intended to

allow manure to be handled in a dry form. Reducing the amount of manure solids stored in wet conditions (without oxygen) and the amount of time in which solids are stored in wet conditions reduces the amount of methane produced. The AMMP projects will be examined as part of a University of California research project, co-funded by the California Air Resources Board and the dairy community, to measure success and inform future strategies.

In fact, new scientific research is already providing guidance to the AMMP. Dr. Ruihong Zhang of UC Davis and her team of researchers are currently examining various types of manure solid-liquid separators, conducting the most comprehensive study of this kind to date. Separators are used to remove solid particles



California dairies are working to improve the way they move, store, and use manure. This includes using technologies like the separators above, which remove solid particles after manure is flushed from barn floors, and before it enters a storage pond.

after manure is flushed from barn floors, and before it enters a storage pond. This technology has been used on a growing number of California dairy farms for more than 30 years. Zhang and her team are working to benchmark reductions, provide information about existing technologies and suggestions for improving them, and ultimately, guide dairy families and the state as they invest in improved manure management.



Scrape (non-flush) manure management technologies help prevent adding water to manure, a first step before drying manure to reduce methane during storage, after which manure can be used as a natural crop nutrient.

Meanwhile, researcher Dr. Frank Mitloehner, also of UC Davis, will measure baseline emissions on AMMP-recipient dairy farms prior to installation of their various projects. This research, along with a follow-up study, will provide a better understanding of methane reduction potential on individual dairies, considering existing conditions and cost-effective, commercially available technologies. In this way, researchers are playing a critical role in evaluating strategies that will further reduce methane emissions, while improving overall air and water quality.

CDFA will soon begin accepting applications for a second round of AMMP funding in March, to be due in May. It is expected that between \$19 - \$33 million will be awarded to AMMP projects in 2018; announcement of recipients is tentatively scheduled for August.

The AMMP is just one example of the many ways in which the state, dairy families, and researchers are currently working together to achieve ambitious climate goals. The current momentum is strong, and continued collaboration will be critical. Through the AMMP, ongoing research, and the [development of dairy digesters](#), California is solidifying its position as a world leader in reducing dairy methane.

Dairy families across California are actively working to fight climate change by improving manure management.

Dairy Cares is a statewide coalition supporting economic and environmental sustainability and responsible animal care. Our members include Bar 20 Dairy Farms, California Cattlemen's Association, California Dairies Inc., California Dairy Campaign, California Dairy Research Foundation, California Farm Bureau Federation, Dairy Farmers of America-Western Area, Dairy Institute of California, F & R Ag Services, GHD, Inc., Hilmar Cheese Co., Joseph Gallo Farms, Land O'Lakes, Merck Animal Health, Milk Producers Council, Ruan Transport Corp., Western United Dairymen, Yosemite Farm Credit and others. For information, visit DairyCares.com or call 916-441-3318. To subscribe to the monthly e-newsletter, contact dairycares@gmail.com.